

WHAT IS CLAIMED IS

1. An on-board antenna comprising:  
a radiation element provided on a dielectric substrate;  
and  
a grounding conductor surrounding a periphery of an outer  
edge portion of the radiation element at a position spaced away  
outwardly from the outer edge portion;  
wherein the radiation element has an inner cut-out portion  
so that the surface of the dielectric substrate to be exposed  
therethrough.
2. An on-board antenna as set forth in Claim 1, wherein the  
radiation element is a substantially quadrangular film having  
two pairs of two opposing corner portions, and the one pair  
of two corner portions is cut so as to form substantially linear  
perturbative portions.
3. An on-board antenna as set forth in Claim 1, wherein the  
radiation element is circular-shape having a predetermined  
width.
4. An on-board antenna as set forth in Claim 1, wherein an  
inner edge portion of the inner cut-out portion follows an outer  
edge portion of the radiation element at a position spaced away

inwardly a predetermined widthwise distance from the outer edge portion of the radiation element.

5. An on-board antenna as set forth in Claim 1, wherein an external size of the on-board antenna with the inner cut-out portion is smaller than that of an on-board antenna without the inner cut-out portion.

6. An on-board antenna as set forth in Claim 1, wherein the radiation element is a semiconductor.